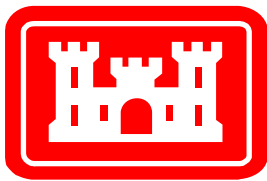


West Onslow Beach and New River Inlet (Topsail Beach),
North Carolina

**Integrated General Reevaluation Report and
Environmental Impact Statement for West
Onslow Beach and New River Inlet (Topsail
Beach), North Carolina**

DRAFT PEER REVIEW PLAN

September 2007



**US Army Corps
of Engineers**

Wilmington District

ACRONYMS & ABBREVIATIONS

AFB – Alternative Formulation Briefing

CESAW – US Army Corps of Engineers, South Atlantic, Wilmington

CWRB – Civil Works Review Board

EIS – Environmental Impact Statement

EPR – External Peer Review

FCSA – Feasibility Cost Sharing Agreement

FEIS – Final Environmental Impact Statement

FSM – Feasibility Scoping Meeting

GRR – General Reevaluation Report

HQ – Headquarters

ITR – Independent Technical Review

LOI – Letter of Intent

NEPA – National Environmental Policy Act

OVEST -- Office of the Chief of Engineers Value Engineering Study Team

PCX-CSDR - National Planning Center of Expertise for Coastal Storm Damage
Reduction

PDT – Project Delivery Team

PMP – Project Management Plan

PRP - Peer Review Plan

P&S – Plans & Specifications

SAD – South Atlantic Division

Walla Walla Dx - Walla Walla District Directorate of Expertise for Civil Works
Cost Engineering

1.0 The Peer Review Plan

This Peer Review Plan (PRP) is a collaborative product of the project delivery team (PDT) and the National Planning Center of Expertise for Coastal Storm Damage Reduction (PCX-CSDR) and the Walla Walla District Directorate of Expertise for Civil Works Cost Engineering (Walla Walla Dx). The PCX-CSDR and Walla Walla Dx shall manage the PRP, which for this study includes Independent Technical Review (ITR) only. External ITR is not deemed necessary for the initial review phase. Each of the following paragraphs (a. through j.) correspond to the guidance provided in paragraphs 6.a. through j. of Engineering Circular 1105-2-408, Planning - Peer Review of Decision Documents, 31 MAY 2005.

a. Decision Document and Team Members. The *Integrated General Reevaluation Report and Environmental Impact Statement for West Onslow Beach and New River Inlet (Topsail Beach)*, NC shall be the decision document. The Topsail Beach GRR is being pursued under the Corps of Engineers' Construction General (CG) Program. The project was authorized by Section 101 of the Water Resources Development Act (WRDA) of 1992, which states:

Except as provided in this section, the following projects for water resources development and conservation and other purposes are authorized to be carried out by the Secretary substantially in accordance with the plans, and subject to the conditions, recommended in the respective reports designated in this section:

(15) WEST ONSLOW AND NEW RIVER INLET, NORTH CAROLINA. – The project for flood control, West Onslow and New River Inlet, North Carolina: Report of the Chief of Engineers, dated November 19, 1991, at a total cost of \$14,100,000, with an estimated Federal cost of \$7,600,000 and an estimated non-Federal cost of \$6,500,000.

The Energy and Water Development Appropriations Act for Fiscal Year 2001, Public Law 106-377, included funds for the Government to initiate a General Reevaluation Report (GRR) of the currently authorized West Onslow Beach and New River Inlet (Topsail Beach) Shore Protection Project, and the remaining shoreline at Topsail Beach.

The study area of the GRR includes all of the shoreline of Topsail Beach. Topsail Beach is located at the southern end of Topsail Island adjacent to New Topsail Inlet in Pender County on the central North Carolina coast. The study area lies entirely within North Carolina's Congressional District 7.

The Topsail Beach GRR is investigating measures and plans for hurricane and storm damage reduction. The study is also documenting incidental recreation benefits. Being located between Cape Fear and Cape Lookout, Topsail Beach is a frequent target for hurricanes and tropical storms tracking along the mid-Atlantic coast. In addition to these direct landfalling storms, many storms that have passed offshore without making landfall have also impacted the study area. Local impacts to the study area varied depending on the landfall location and strength of the storm.

Typical solutions considered for this study area are berm and dune beachfills using material dredged from offshore borrow sites, and in some cases building relocations, or coastal structures such as groins or breakwaters.

The estimated range of initial construction cost for the various alternatives varies between \$20 million and \$40 million, and estimated annual renourishment costs are approximately \$9 million. Renourishment would continue through 50 years if the project is authorized. The selected plan for recommendation has estimated initial costs of \$31 million.

Key PDT members are shown in the table below.

| ROLE | NAME | ORGANIZATION |
|--------------------|------|--------------|
| Project Manager | | |
| Program Manager | | |
| Lead Planner | | |
| Biologist | | |
| Biologist | | |
| Cultural Resources | | |
| Coastal/H&H | | |
| Geotechnical | | |
| Cost Engineering | | |
| Economics | | |
| Economics | | |
| Real Estate | | |

For more information regarding the PRP, the project manager for the GRR may be contacted as follows:

US Army Corps of Engineers – Wilmington District

Independent Technical Review Team Leaders

National Planning Center of Expertise for Coastal Storm Damage Reduction PCX-CSDR
US Army Corps of Engineers – North Atlantic Division

US Army Corps of Engineers – Philadelphia District

Walla Walla District Directorate of Expertise for Civil Works Cost Engineering

b. External Peer Review. EC 1105-2-408 provides the process for deciding whether or not to employ external peer review. The following is an excerpt of EC section 9.a: *Decision documents covered by this Circular will undergo EPR if there is a vertical team consensus (involving district, major subordinate command and Headquarters members) that the covered subject matter (including data, use of models, assumptions, and other scientific and engineering information) is novel, is controversial, is precedent setting, has significant interagency interest, or has significant economic, environmental and social effects to the nation. Decision documents covered by this Circular that do not meet the standard shall undergo ITR as described in paragraph 8, above.*

Please see the External Peer Review Decision Checklist below (1 - 5).*

1. Novel subject matter? No, this is a typical shore protection project.
2. Controversial subject matter? No, this is a typical shore protection project.
3. Precedent setting? No, this is a typical shore protection project.

4. Unusually significant interagency interest? No, this is a typical shore protection project.
5. Unusually significant economic, environmental, and social effects to the nation? No, the anticipated costs and effects are not unusual. Estimated construction costs of about \$32 million will not exceed the \$50 million trigger amount suggested for recommendation of an EPR.

Decision: The PDT suggests that an Independent Technical Review by a US Army Corps of Engineers team external to the project district, CESAW, will be sufficient to comply with the spirit of EC 1105-2-408, Planning - Peer Review of Decision Documents, dated 31 May 2005. It is not anticipated that any new methodologies will be used in the analysis and preparation of the Integrated GRR & EIS, or that any of the data collected or analyzed would be considered influential scientific data.

c. Anticipated Peer Review Schedule.

| REVIEW PHASE | COMPLETION DATE | |
|--|-----------------|-------------|
| In-House Review AFB Materials | Spring | 2004 |
| Alternative Formulation Briefing (AFB) | July | 2004 |
| ITR Draft GRR & EIS | Summer | 2005 |
| Draft GRR & EIS / Policy Review | Summer | 2006 |
| Draft GRR & EIS / NEPA Public Review | Summer | 2006 |
| Civil Works Review Board | November | 2007 |
| Final EIS / NEPA Public Review (MSC Commanders Public Notice) | December | 2007 |

d. Conducting External Peer Review. The relevant Planning Center(s) of Expertise will make the final determination as to whether or not External Peer Review is to be conducted. For this Integrated GRR & EIS, this decision is the responsibility of the PCX-CSDR.

e. Public Comment on Decision Document. Once completed, the Integrated GRR & EIS will be disseminated to resource agencies, interest groups, and the public as part of the National Environmental Policy Act (NEPA) environmental compliance review. Please note where “FEIS / NEPA Public Review” is highlighted in the “Peer Review Plan” flow chart included as Attachment 1. Public entities and private individuals may also review and comment on draft documents as members of the PDT.

f. Provision of Public Comments to Reviewers. All significant and relevant public comments will be provided as part of the review package to Peer Reviewers as they are available and may include but not be limited to: scoping letters, meeting minutes, other received letters, and emails.

g. Anticipated Number of Reviewers.** The relevant Planning Center(s) of Expertise shall make the final determination for the number of reviewers needed. For this Integrated GRR & EIS, this decision is the responsibility of the PCX-CSDR.

h. Primary Review Disciplines and Expertise. The number of reviewers (Level of Review) shall vary as depicted under “Review Phase” in the “Peer Review Plan” flow chart included as Attachment 1. The PCX-CSDR and the Walla Walla Dx shall make the final determination for the discipline type and number needed of reviewers depending upon the “Review Phase.” The minimal number of discipline types expected is 9 as, shown in the following table. As the Integrated GRR & EIS proceeds, additional reviewing disciplines may be added.

| PRELIMINARY REVIEW DISCIPLINES FOR ITR/EPR |
|--|
| Planning |
| Environmental / NEPA Compliance |
| Cultural Resources |
| Economics |
| Recreation |
| Coastal Engineering / Hydrology & Hydraulics |
| Geotechnical Engineering |
| Cost Estimating |
| Real Estate |

i. Selection of External Peer Reviewers. The relevant Planning Center(s) of Expertise shall make the final determination for the discipline type and number of reviewers needed as well as which if any External Peer Reviewers are needed. For this Integrated GRR & EIS, this decision is the responsibility of the PCX-CSDR.

j. Nomination of Peer Reviewers by the Public. The PCX-CSDR shall determine if Peer Reviewers will be nominated by the public. The public will have opportunities to review the Integrated GRR & EIS as required by the NEPA compliance process.

k. Miscellaneous Items.

i. DrChecks. DrChecks will be used to conduct the ITR.

ii. Model Certification. All models developed for or modified during use in this study will be subjected to ITR and will be certified as required by Engineer Circular (EC) 1105-2-407, U.S. Army Corps of Engineers. *Planning Models Improvement Program: Model Certification.*

There is one model used during this study that was developed for previous studies and at the suggestion of the AFB, was modified during this study. That model is the Generalized Risk AND Uncertainty - Coastal (GRANDUC) model for estimating damages. The model was included in development of the Draft Integrated GRR & EIS which had an ITR in 2005. The certification status of the model will be coordinated with the PCX-CSDR.

** See Attachment 2

ATTACHMENT 1

PEER REVIEW PLAN

| PEER REVIEW PLAN | |
|--|---|
| FEASIBILITY PHASE | |
| Study Product or Milestone | Review by |
| Feasibility Scoping Meeting | (not part of this study) |
| Value Engineering Package | OVEST PDT |
| Alternative Formulation Briefing | PDT, Supervisors, In-House Review Team |
| Draft GRR & EIS Policy | PDT, Supervisors, ITR Team, OC HQ, SAD |
| CWRB Review Package | PDT, Supervisors |
| Final GRR & EIS Risk Analysis Cost Engineering | CWRB Walla Walla Dx Walla Walla Dx |
| Chief of Engineers Report | HQ→ ASA(CW)→ OMB→ Congress |

* Reference External Peer Review Decision Checklist in Section b., questions 1 - 5: if any changes occur in checklisted items, the vertical team will determine if External Peer Review (EPR) will be required. A decision regarding EPR is requested in writing from SAD and HQ Regional Integration Team Leader (RIT).

**A Scoping Letter during the Reconnaissance Phase provides the public the opportunity to share any known concerns.

***The Project Delivery Team (PDT) includes the non-Federal Sponsor, stakeholders, and resource agencies.

ATTACHMENT 2

ITR APPROVAL REQUEST

Establishment of ITR responsibility has been an evolving process. Skilled and experienced personnel who have not been associated with the development of the Topsail Beach GRR products have been previously requested by Wilmington District Plan Formulation and Economics. It is requested that these ITR Team Members be evaluated and approved for the completed Draft Integrated GRR & EIS. Below are the biographies for the ITR Team Members.

EPR members will be determined by the PCX-CSDR.

Key ITR members are shown in the table below.

| ROLE | NAME | ORGANIZATION |
|-----------------------------|------|--------------|
| Planning / Plan Formulation | | CENAP- |
| Environmental | | CENAP- |
| Cultural Resources | | CENAP- |
| Coastal/H&H | | CENAP- |
| Geotechnical | | CENAP- |
| Cost Engineering | | CENAP- |
| Economics | | CENAP- |
| Recreation | | CESWT |
| Real Estate | | CENAB- |

Below are the biographies for the anticipated ITR Team Members.

Plan Formulation / Planning

Name: --

Grade and position title: GS-XX, XXIST

Organization: XX District, XX Division (CEXXX)

Education: XX

Years of experience: XX

Major achievements and projects: XX

Other awards and relevant accomplishments: XX

Professional Memberships: XX

Training: XX

Environmental

Name: --

Grade and position title: GS-XX, XXIST

Organization: XX District, XX Division (CEXXX)

Education: XX

Years of experience: XX

Major achievements and projects: XX

Other awards and relevant accomplishments: XX

Professional Memberships: XX

Training: XX

Economics

Name: --

Grade and position title: GS-XX, XXIST

Organization: XX District, XX Division (CEXXX)

Education: XX

Years of experience: XX

Major achievements and projects: XX

Other awards and relevant accomplishments: XX

Professional Memberships: XX

Training: XX

Cost Estimating

Name: --

Grade and position title: GS-XX, XXIST

Organization: XX District, XX Division (CEXXX)

Education: XX

Years of experience: XX

Major achievements and projects: XX

Other awards and relevant accomplishments: XX

Professional Memberships: XX

Training: XX

Coastal Engineering / Hydrology & Hydraulics

Name: --

Grade and position title: GS-XX, XXIST

Organization: XX District, XX Division (CEXXX)

Education: XX

Years of experience: XX

Major achievements and projects: XX

Other awards and relevant accomplishments: XX

Professional Memberships: XX

Training: XX

Geotechnical Engineering

Name: --

Grade and position title: GS-XX, XXIST

Organization: XX District, XX Division (CEXXX)

Education: XX

Years of experience: XX

Major achievements and projects: XX

Other awards and relevant accomplishments: XX

Professional Memberships: XX

Training: XX

Real Estate

Name: --

Grade and position title: GS-XX, XXIST

Organization: XX District, XX Division (CEXXX)

Education: XX

Years of experience: XX

Major achievements and projects: XX

Other awards and relevant accomplishments: XX

Professional Memberships: XX

Training: XX

Recreation

Name: --

Grade and position title: GS-XX, XXIST

Organization: XX District, XX Division (CEXXX)

Education: XX

Years of experience: XX

Major achievements and projects: XX

Other awards and relevant accomplishments: XX

Professional Memberships: XX

Training: XX

Cultural Resources

Name: --

Grade and position title: GS-XX, XXIST

Organization: XX District, XX Division (CEXXX)

Education: XX

Years of experience: XX

Major achievements and projects: XX

Other awards and relevant accomplishments: XX

Professional Memberships: XX

Training: XX